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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|-----------------------------|------------------------|
| 10/767,728 | 01/30/2004 | Michael Shenfield | T8467911US | 6100 |
| 7590 10/05/2007 Gowling Lafleur Henderson LLP Suite 4900 Commerce Court West Toronto, ON M5L 1J3 CANADA | | | EXAMINER HOANG, PHUONG N | |
| | | | ART UNIT 2194 | PAPER NUMBER |
| | | | MAIL DATE 10/05/2007 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/767,728 | Applicant(s) SHENFIELD ET AL. | |
| | Examiner Phuong N. Hoang | Art Unit 2194 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>1/05/06, 5/10/06, 7/22/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1 – 42 are pending for examination.
2. This office action is in response to application filed on 1/30/04.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 11 and 31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. As to claims 11 and 31, it is not clearly understood what "ECMA" means. The term needs to be written the whole term, and use abbreviation next to it in the quote. Later the term can be refers using the short or abbreviated term.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Art Unit: 2194

7. Claims 21 – 41 are merely recites a system comprising data structure, target application, interface component, software per se. The body of the claim does not comprise any hardware to execute the system as claimed in the pre-amble.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

9. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

10. Claims 1 – 10, 12 – 30, 32 – 42 are rejected under 35 U.S.C. 102(e) as being anticipated by Sharma, US pub. no. 2003/0204645.

11. **As to claim 1**, Sharma teaches a method for providing dynamic interaction between a pair of application programs by a platform neutral interface of a terminal, the pair of applications including a requestor application desiring access to a target application, the method comprising the steps of:

Registering (register, 0133 – 0142, 0146) access information of the target application (Web Service Description Language (WSDL) document corresponding to the target service, 0012, 0112), the access information including published access information made available in a data structure for retrieval by the platform neutral interface (server side API 115, 0026, 0038, 0041, 0043);

receiving an access request (client made remote calls to server to obtain the service, 0035) by the platform neutral interface from the requester application, the access request including request content corresponding to the published access information of the target application;

obtaining an interface component (server side JAX-RPC APIs, 0043, 0064, 0067) by using the request content to search the data structure (lookup 0116), the interface component configured for enabling communication between the platform neutral interface and the target application in an access format expected by the target application; and

employing (inherent) the interface component by the platform neutral interface to satisfy the access request of the requestor application for interaction with the target application.

12. **As to claim 2**, Sharma teaches wherein the target application is selected from the group comprising: the target application configured for communication in a compatible language with the platform neutral interface; and the target application configured for communication in a incompatible language with the platform neutral interface (WSDL-to-Java mapping, 0068 - 0071).

13. **As to claim 3**, Sharma teaches wherein the incompatible language is that used by a native runtime environment of the terminal (JAX-RPC runtime system, 0043).

14. **As to claim 4**, Sharma teaches wherein the interface component is an application program interface (API) expressed in the compatible language (0043).

15. **As to claim 5**, Sharma teach wherein the interface component is an extension element configured for providing mediation between the platform neutral interface and the target application expressed in the incompatible language (0068 - 0071).

16. **As to claim 6**, Sharma teaches registering the extension element with the platform neutral interface through an extension interface, the published access information of the extension element being added to the data structure (0045).

17. **As to claims 7 - 8**, Sharma teaches accessing the target application through the platform neutral interface using the extension element to call a corresponding application program interface (API) expressed in the incompatible language of the target application and employing a search algorithm with the request content for identifying matching ones of the interface component for use by the platform neutral interface (0068 – 0071, 0096 - 0101).

18. **As to claims 9 - 10**, Sharma teaches wherein the language used to express the platform neutral interface is selected from the group comprising; a structured definition language based on xml and a script (xml, 0035, 0045).

19. **As to claim 12**, Sharma teaches assembling the request content to include selected from the group comprising; a local location and a remote location (0043, 0045, 0046).

20. **As to claims 13 - 14**, Sharma teaches wherein the remote location is on another terminal coupled to said terminal through a network, the other terminal having one of the pair of applications for network interaction with the other of the pair of applications (network 120).

21. **As to claim 15**, Sharma teaches wherein the data structure is selected from the group comprising an application profile table and an application API descriptor table (xml schema, 0007, 0107).

22. **As to claim 16**, Sharma teaches wherein the application profile table includes application profiles of a plurality of target applications (0028, 0035).

23. **As to claim 17**, Sharma teaches wherein the application API descriptor table includes descriptors selected from the group comprising; API descriptors and extension element descriptors (WSDL, 0065).

24. **As to claim 18**, Sharma teaches wherein the data structure includes the access information selected from the group comprising; application URI, application version,

Art Unit: 2194

application description, and a predefined set of matching API construct pairs (URI, 0134 – 0140).

25. **As to claims 19 - 20**, Sharma teaches providing an interface of the platform neutral interface selected from the group comprising: an extension interface, a query and registration interface, and an execution interface (JAX).

26. **As to claim 21**, this is the system claim of claim 1. See rejection for claim 1 above.

27. **As to claims 22 – 41**, see rejection for claims 2 – 20 above.

28. **As to claim 42**, this is the product claim of claim 1. See rejection for claim 1 above.

Claim Rejections - 35 USC § 103

29. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

Art Unit: 2194

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

30. Claims 11 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharma, US pub. no. 2003/0204645 in view of Bloch, US pub. no. 2002/0129129.

31. As to claims 11 and 31, Sharma does not explicitly teach wherein the language used to express the script is ECMA script.

Bloch teaches ECMA script (ECMA script, figures 4 and 8 and associated text, especially 0062, 0064, 0086).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Sharma and Block's system because ECMA script would provide a free-form script text that must be parsed by a specific script engine compliant with ECMA format as designed for the system.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong N. Hoang whose telephone number is (571)272-3763. The examiner can normally be reached on Monday - Friday 9:00 am to 5:30 pm.

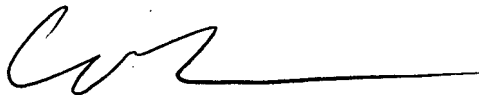
Art Unit: 2194

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on 571-272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ph

September 29, 2007



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